

Work Order ID 113045

February-11-14 3:25:47 PM

113045

Page 1

Item ID: D3443-043 **Accept** ***N900040100*** **Setup** **Start** ***NS1***
Revision ID:
Item Name: Strut Weldment Assembly **Stop** ***NS2***
Start Date: 2/10/14 **Start Qty:** 4.00 ***4*** **Cust Item ID:**
Required Date: 2/10/14 **Req'd Qty:** 4.00 ***4*** **Customer:**

Reference:

Approvals: Process Plan: ML5 Date: 14-02-12 Tooling: _____ Date: _____ Run Start *NR1*
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop *NR2*

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only

Work Order: _____	DISPOSITION	AGAINST DEPARTMENT/PROCESS					
Part No. _____	Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Suspected Unapproved <input type="checkbox"/>	Skid-tube <input type="checkbox"/> Machining <input type="checkbox"/> Thermoforming <input type="checkbox"/> Large Fab <input type="checkbox"/>	Crosstube <input type="checkbox"/> Small Fab <input type="checkbox"/> Finishing <input type="checkbox"/> Composite <input type="checkbox"/>	Water Jet <input type="checkbox"/> Prod. Eng. Coor. <input type="checkbox"/> Rec/Store/Packaging <input type="checkbox"/> Supplier <input type="checkbox"/>	Engineering <input type="checkbox"/> Quality <input type="checkbox"/> Other <input type="checkbox"/>		
NCR No. _____							

Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design									
Doc/Data									
Equip/Tooling									
Handling/Pre									
Material									
Operator									
Offset/Setup									
Process									
Supplier									
Training									
Transport									
Unapproved									

FAULT CATEGORY

Landing Gear	General			
Bending	Bend	<input type="checkbox"/>	Outside Dimensions	<input type="checkbox"/>
Centre Not Concentric	BOM/Route	<input type="checkbox"/>	Over/Under tolerance	<input type="checkbox"/>
Cracks	Broken/Damage/Defect	<input type="checkbox"/>	Part Incorrect	<input type="checkbox"/>
Crimp/Kink/Ripple/Wave	Burrs	<input type="checkbox"/>	Part Lost/Missing	<input type="checkbox"/>
Cuffs	Contamination	<input type="checkbox"/>	Part Moved	<input type="checkbox"/>
Crushing	Countersink	<input type="checkbox"/>	Positioned Wrong	<input type="checkbox"/>
Heat Treat	Cut Too Short	<input type="checkbox"/>	Power Loss/Surge	<input type="checkbox"/>
Inspection Strip in Tube	Drawing	<input type="checkbox"/>	Pressure/Forced	<input type="checkbox"/>
Marks/Chatter	Drill Holes	<input type="checkbox"/>	Set-up	<input type="checkbox"/>
Turning Sequence	Finish	<input type="checkbox"/>	Temperature/Cure	<input type="checkbox"/>
Wave/Twist in Tube	Fit/Function	<input type="checkbox"/>	Weld	<input type="checkbox"/>
			Wrong Stock Pulled	<input type="checkbox"/>
			Other	<input type="checkbox"/>

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Page 2

Item ID: D3443-043

Accept

N900040100

Setup Start

NS1

Revision ID:

Item Name: Strut Weldment Assembly

Stop

NS2

Start Date: 2/10/14 Start Qty: 4.00

4

Cust Item ID:

Required Date: 2/10/14 Req'd Qty: 4.00

4

Customer:

Reference:

Approvals: Process Plan: _____

Date: _____

Tooling: _____

Date: _____

Run Start

NR1

QC: _____

Date: _____

SPC (Y/N): _____

Date: _____

Stop

NR2

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

130

130

Powdercoat

Powder Coating

White Gloss(Ref:4.3.5.2) per QSI005 4.3-Steel

M128027

0.00

H of 11-4-30.

DAS 34 9-89

Memo

0.00

1-Mask holes as per dwg D3443

START TIME:

11:30

OVEN TEMPERATURE: 400

FINISH TIME:
5:00

140

QC3- Inspect Part Finish

0.00

4 8 20 14/04/30

140

QC

Quality Control

Memo

0.00

150

Identify as per dwg & Stock Location: 81485 0.00

150

Packaging

Packaging

Memo

0.00

4X 14-5-01

DAS

26

9-89

1

Date: _____



WORK ORDER NON-COMPLIANCE / UPDATE

QA Closed:

Date:

Work Order update only

Work Order: _____				DISPOSITION		AGAINST DEPARTMENT/PROCESS					
				Rework <input type="checkbox"/>	Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>			
				Scrap <input type="checkbox"/>	Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coor. <input type="checkbox"/>	Quality <input type="checkbox"/>			
				Use-as-is <input type="checkbox"/>	Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>			
NCR No. _____				Suspected Unapproved <input type="checkbox"/>	Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>				
Root Cause		Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector	
Design	<input type="checkbox"/>										
Doc/Data	<input type="checkbox"/>										
Equip/Tooling	<input type="checkbox"/>										
Handling/Pre	<input type="checkbox"/>										
Material	<input type="checkbox"/>										
Operator	<input type="checkbox"/>										
Offset/Setup	<input type="checkbox"/>										
Process	<input type="checkbox"/>										
Supplier	<input type="checkbox"/>										
Training	<input type="checkbox"/>										
Transport	<input type="checkbox"/>										
Unapproved	<input type="checkbox"/>										
FAULT CATEGORY											
Landing Gear				General							
<input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric <input type="checkbox"/> Cracks <input type="checkbox"/> Crimp/Kink/Ripple/Wave <input type="checkbox"/> Cuffs <input type="checkbox"/> Crushing <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Marks/Chatter <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube				<input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damage/Defect <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drawing <input type="checkbox"/> Drill Holes <input type="checkbox"/> Finish <input type="checkbox"/> Fit/Function							
				<input type="checkbox"/> Folio/Program <input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete/Unqualified <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Misaligned/off center <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Off-set <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence							
				<input type="checkbox"/> Outside Dimensions <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge							
				<input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Set-up <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled							
				<input type="checkbox"/> Other							

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Page 3

Item ID:	D3443-043	Accept	*N900040100*	Setup	Start	*NS1*	
Revision ID:							
Item Name:	Strut Weldment Assembly					*NS2*	
Start Date:	2/10/14	Start Qty: 4.00	*4*	Cust Item ID:			
Required Date:	2/10/14	Req'd Qty: 4.00	*4*	Customer:			
Reference:							
Approvals:	Process Plan:	Date:	Tooling:	Date:	Run	Start	*NR1*
	QC:	Date:	SPC (Y/N):	Date:	Stop		*NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
160 *160* QC	QC21- Final Inspection - Work Order Release	0.00							<u>MJ 14-05-01</u>
Quality Control	Memo	0.00							<u>(H) 14-05-01</u>

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed:

Date:

Work Order update only

Work Order Update Form				Against Department/Process					
Work Order:		Disposition		Rework	Skid-tube	Crosstube	Water Jet	Engineering	
Part No.		Scrap	Machining	Small Fab	Prod. Eng. Coor.	Quality			
NCR No.		Use-as-is	Thermoforming	Finishing	Rec/Store/Packaging	Other			
		Suspected Unapproved	Large Fab	Composite	Supplier				
Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design									
Doc/Data									
Equip/Tooling									
Handling/Pre									
Material									
Operator									
Offset/Setup									
Process									
Supplier									
Training									
Transport									
Unapproved									
Fault Category									
Landing Gear			General						
Bending	General		Bend	Folio/Program	Outside Dimensions	Pressure/Forced			
Centre Not Concentric			BOM/Route	Grain	Over/Under tolerance	Set-up			
Cracks			Broken/Damage/Defect	Hardware	Part Incorrect	Temperature/Cure			
Crimp/Kink/Ripple/Wave			Burrs	Inspection Incomplete/Unqualified	Part Lost/Missing	Weld			
Cuffs			Contamination	Instructions Incomplete/Unclear	Part Moved	Wrong Stock Pulled			
Crushing			Countersink	Misaligned/off center	Positioned Wrong				
Heat Treat			Cut Too Short	Mislabeled	Power Loss/Surge				
Inspection Strip in Tube			Drawing	Misread					
Marks/Chatter			Drill Holes	Off-set					
Turning Sequence			Finish	Out of Calibration					
Wave/Twist in Tube			Fit/Function	Out of Sequence					

Picklist Print

Page 1

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Work Order ID: 113045

113045

Parent Item: D3443-043

D3443-043

Parent Item Name: Strut Weldment Assembly

Start Date: 2/10/14

Required Date: 2/10/14

Comments: IPP REV. A 05.11.17 NEW ISSUE EC

Start Qty: 4.00

Required Qty: 4.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	-------------	--------------	---------------	----------------	--------

D3443-3		Manufactured	No		100	Each	27.0000	1	4	**		14-04-29
D3443-3												
Clevis												

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
WA002	27	
102879	16	
109131	11	

D3443-7		Manufactured	No		100	Each	0.0000	1	4	**	4	14-04-29
D3443-7												
Tubing												

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
ST079	11	
73566	11	

D3966-4-750		Manufactured	No		100	Each	25.0000	1	4	**		
D3966-4-750												
Pin, Dowel												

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
WA002	14	
88575	14	

DQA:

Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

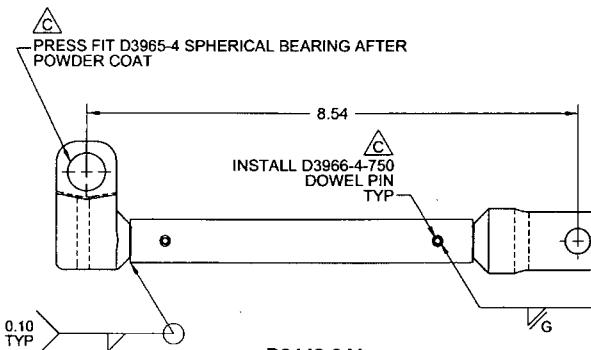
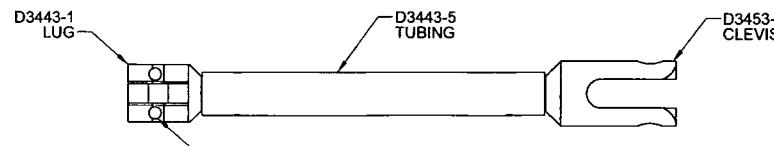
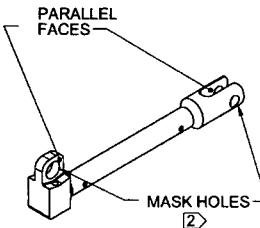
QA Closed:

Date: _____

Work Order update only

Work Order: _____	DISPOSITION			AGAINST DEPARTMENT/PROCESS					
Part No. _____	Rework <input type="checkbox"/>	Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>				
NCR No. _____	Scrap <input type="checkbox"/>	Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coor. <input type="checkbox"/>	Quality <input type="checkbox"/>				
	Use-as-is <input type="checkbox"/>	Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>				
	Suspected Unapproved <input type="checkbox"/>	Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>					
Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design									
Doc/Data									
Equip/Tooling									
Handling/Pre									
Material									
Operator									
Offset/Setup									
Process									
Supplier									
Training									
Transport									
Unapproved									
FAULT CATEGORY									
Landing Gear	General								
	Bending <input type="checkbox"/>	Bend <input type="checkbox"/>	Folio/Program <input type="checkbox"/>	Outside Dimensions <input type="checkbox"/>	Pressure/Forced <input type="checkbox"/>				
	Centre Not Concentric <input type="checkbox"/>	BOM/Route <input type="checkbox"/>	Grain <input type="checkbox"/>	Over/Under tolerance <input type="checkbox"/>	Set-up <input type="checkbox"/>				
	Cracks <input type="checkbox"/>	Broken/Damage/Defect <input type="checkbox"/>	Hardware <input type="checkbox"/>	Part Incorrect <input type="checkbox"/>	Temperature/Cure <input type="checkbox"/>				
	Crimp/Kink/Ripple/Wave <input type="checkbox"/>	Burrs <input type="checkbox"/>	Inspection Incomplete/Unqualified <input type="checkbox"/>	Part Lost/Missing <input type="checkbox"/>	Weld <input type="checkbox"/>				
	Cuffs <input type="checkbox"/>	Contamination <input type="checkbox"/>	Instructions Incomplete/Unclear <input type="checkbox"/>	Part Moved <input type="checkbox"/>	Wrong Stock Pulled <input type="checkbox"/>				
	Crushing <input type="checkbox"/>	Countersink <input type="checkbox"/>	Misaligned/off center <input type="checkbox"/>	Positioned Wrong <input type="checkbox"/>					
	Heat Treat <input type="checkbox"/>	Cut Too Short <input type="checkbox"/>	Mislabeled <input type="checkbox"/>	Power Loss/Surge <input type="checkbox"/>	Other <input type="checkbox"/>				
	Inspection Strip in Tube <input type="checkbox"/>	Drawing <input type="checkbox"/>	Misread <input type="checkbox"/>						
	Marks/Chatter <input type="checkbox"/>	Drill Holes <input type="checkbox"/>	Off-set <input type="checkbox"/>						
	Turning Sequence <input type="checkbox"/>	Finish <input type="checkbox"/>	Out of Calibration <input type="checkbox"/>						
	Wave/Twist in Tube <input type="checkbox"/>	Fit/Function <input type="checkbox"/>	Out of Sequence <input type="checkbox"/>						

ITEM	QTY -041	P/N	DESCRIPTION
1	X	D3443-041	STRUT WELDMENT ASSEMBLY
2	1	D3443-1	LUG
3	1	D3443-5	TUBING
4	1	D3453-1	CLEVIS
5	1	D3965-4	BEARING, SPHERICAL
6	2	D3966-4-750	PIN, DOWEL



D3443-041

NOTES:

- 1) MATERIAL: N/A
- 2) FINISH: POWDER COAT WHITE (4.3.5.2) PER DART QSI 005 4.3
NO POWDER COAT IN HOLES
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY WITH DART P/N USING FINE POINT PERMANENT INK MARKER
- 7) WEIGHT: 1.33 lbs
- 8) WELD PER DART QSI 004

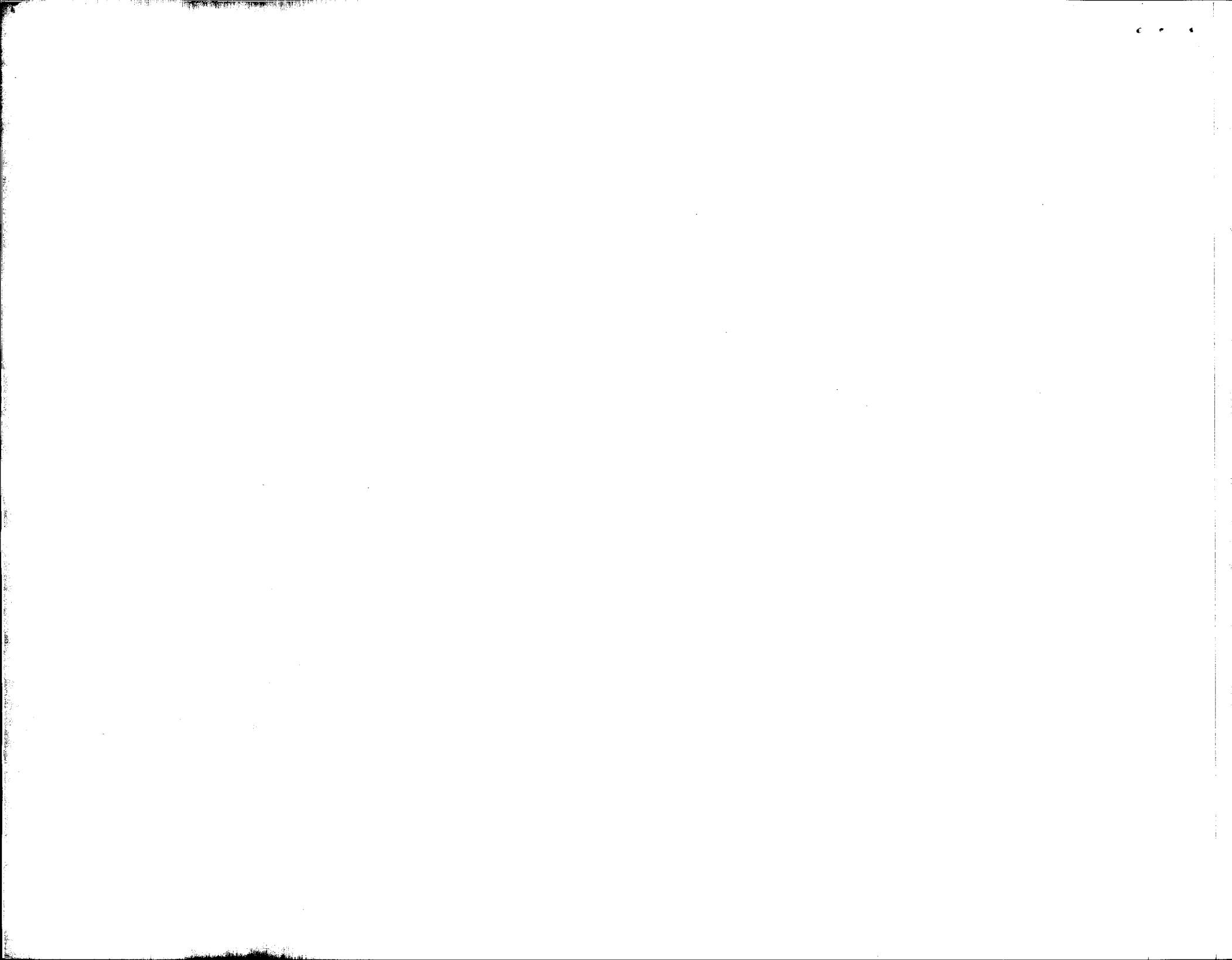
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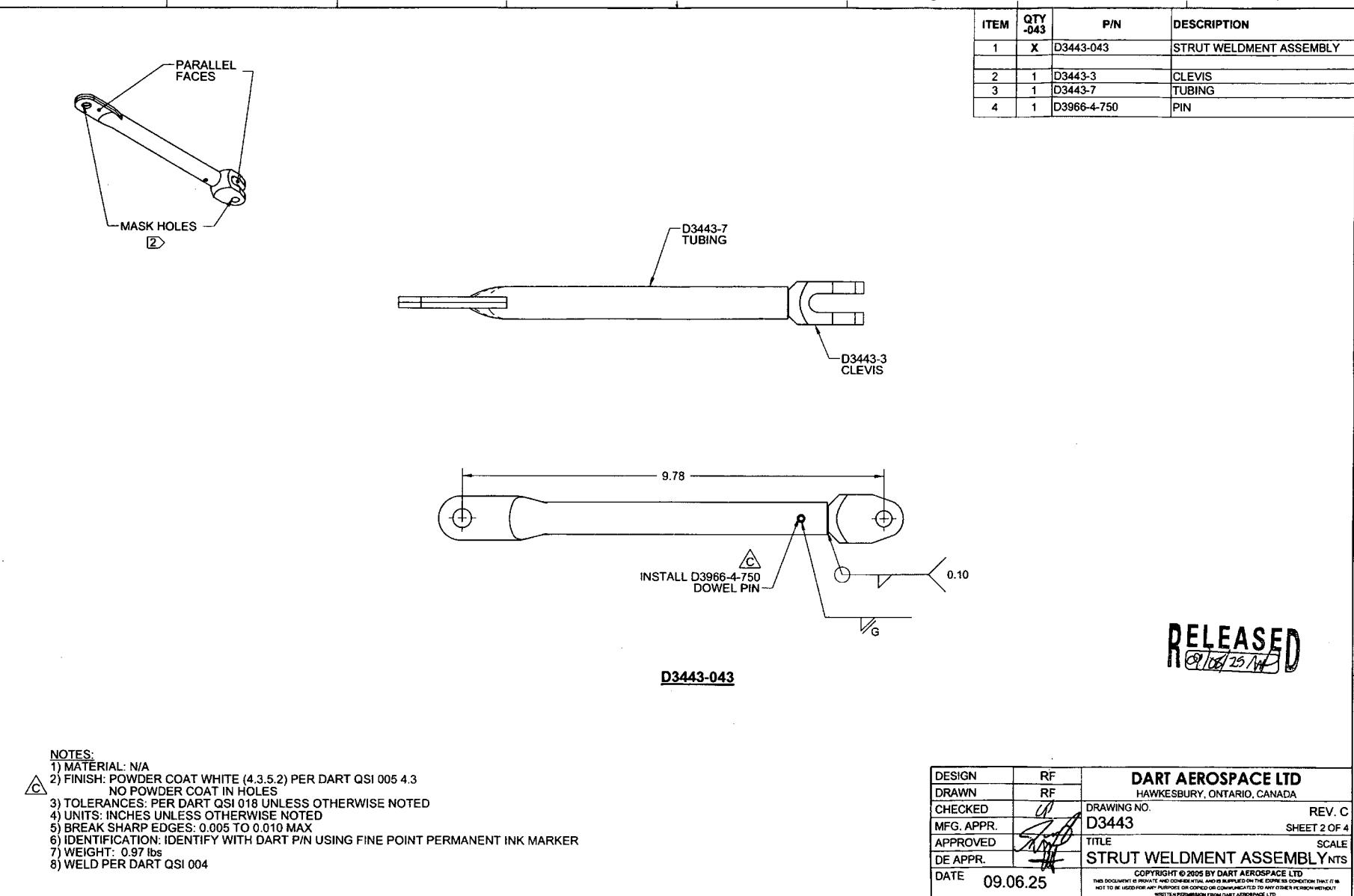
NO. 113045 MLJ

14-02-12

RELEASED
09/08/2014

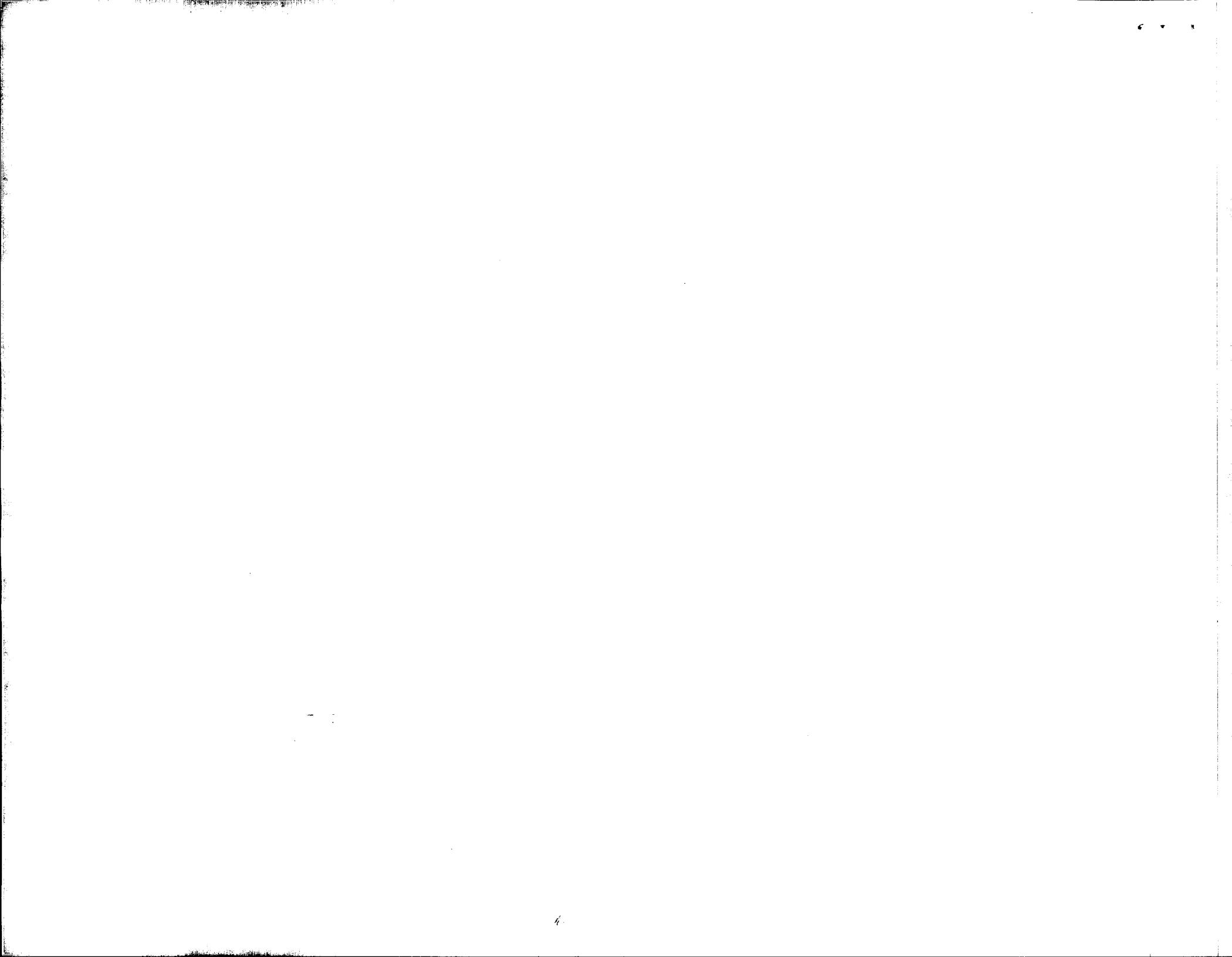
C	DRAWING UPDATED TO CURRENT STANDARDS. REVISED NOTE #2 (ZN A8-1, A8-2); 0.820 WAS 0.720 & 1.43 WAS 0.53 (ZN C2-3); 0.551 WAS 0.451 (ZN C1-3); R0.219 WAS REMOVED (ZN C1-3); R0.219 WAS ADDED (ZN C4-1); R0.219 WAS REMOVED (ZN C4-2); 0.5068-4-750 WAS McMaster-Carr P/N (ZN B5-1); REF PAR 09-018	RF	09.06.25
B	ADDED -9 PIN, REMOVED BALL PLUNGER; REVISE TOLERANCE; & Ø0.125 WAS #30	RF	05.12.05
A	NEW ISSUE	RF	05.09.02
REV.	DESCRIPTION	BY	DATE
DESIGN	RF	DART AEROSPACE LTD	
DRAWN	RF	HAWKESBURY, ONTARIO, CANADA	
CHECKED	<i>JL</i>	DRAWING NO.	REV. C
MFG. APPR.	<i>JL</i>	D3443	SHEET 1 OF 4
APPROVED	<i>JL</i>	TITLE	SCALE
DE APPR.	<i>JL</i>	STRUT WELDMENT ASSEMBLY	NTS
DATE	09.06.25	COPYRIGHT © 2005 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

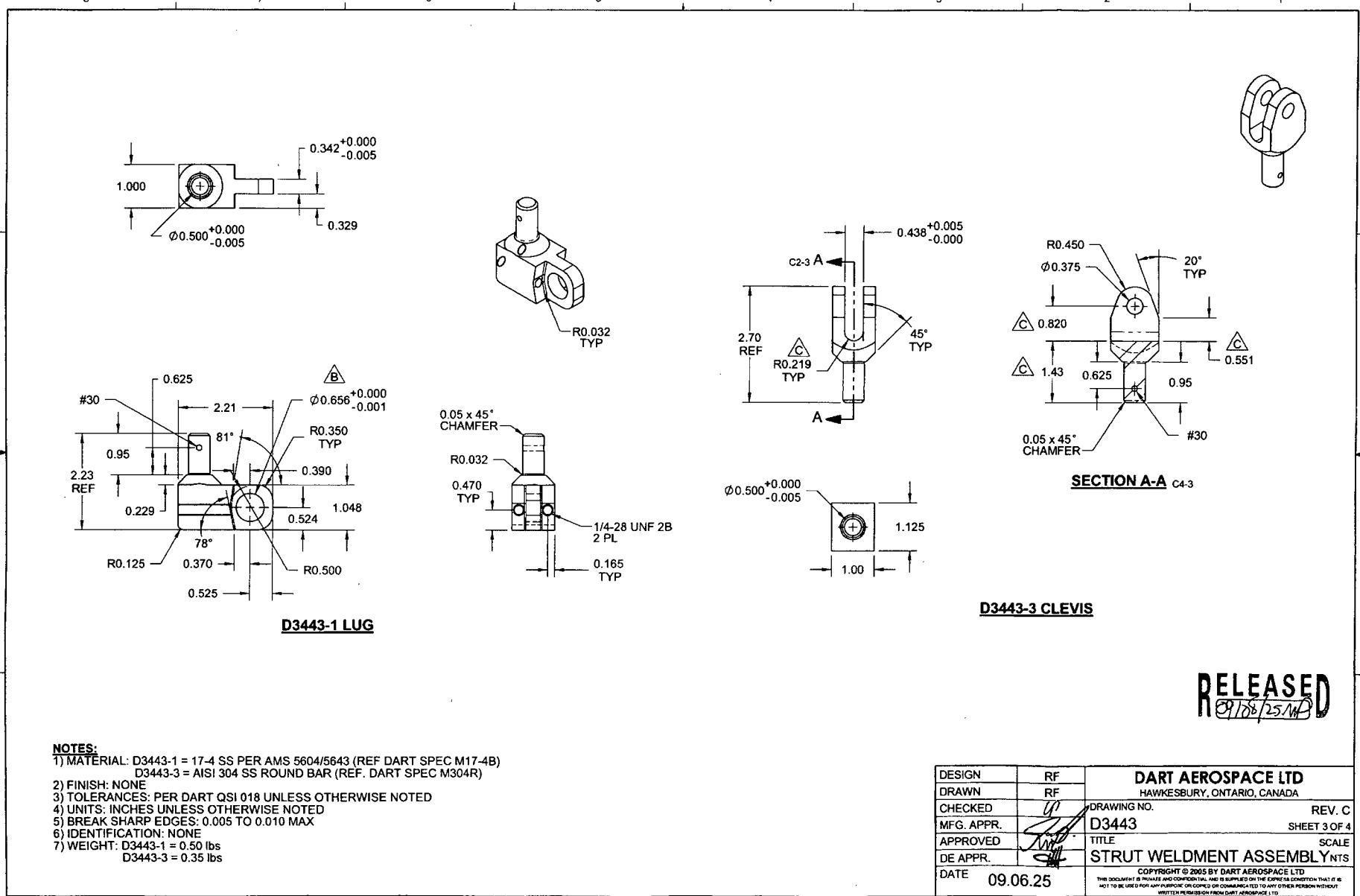




DESIGN	RF	DART AEROSPACE LTD
DRAWN	RF	HAWKESBURY, ONTARIO, CANADA
CHECKED	JP	DRAWING NO.
MFG. APPR.		REV. C
APPROVED	SJ	D3443
DE APPR.		SHEET 2 OF 4
DATE	09.06.25	TITLE
		SCALE
		STRUT WELDMENT ASSEMBLY
		NTS

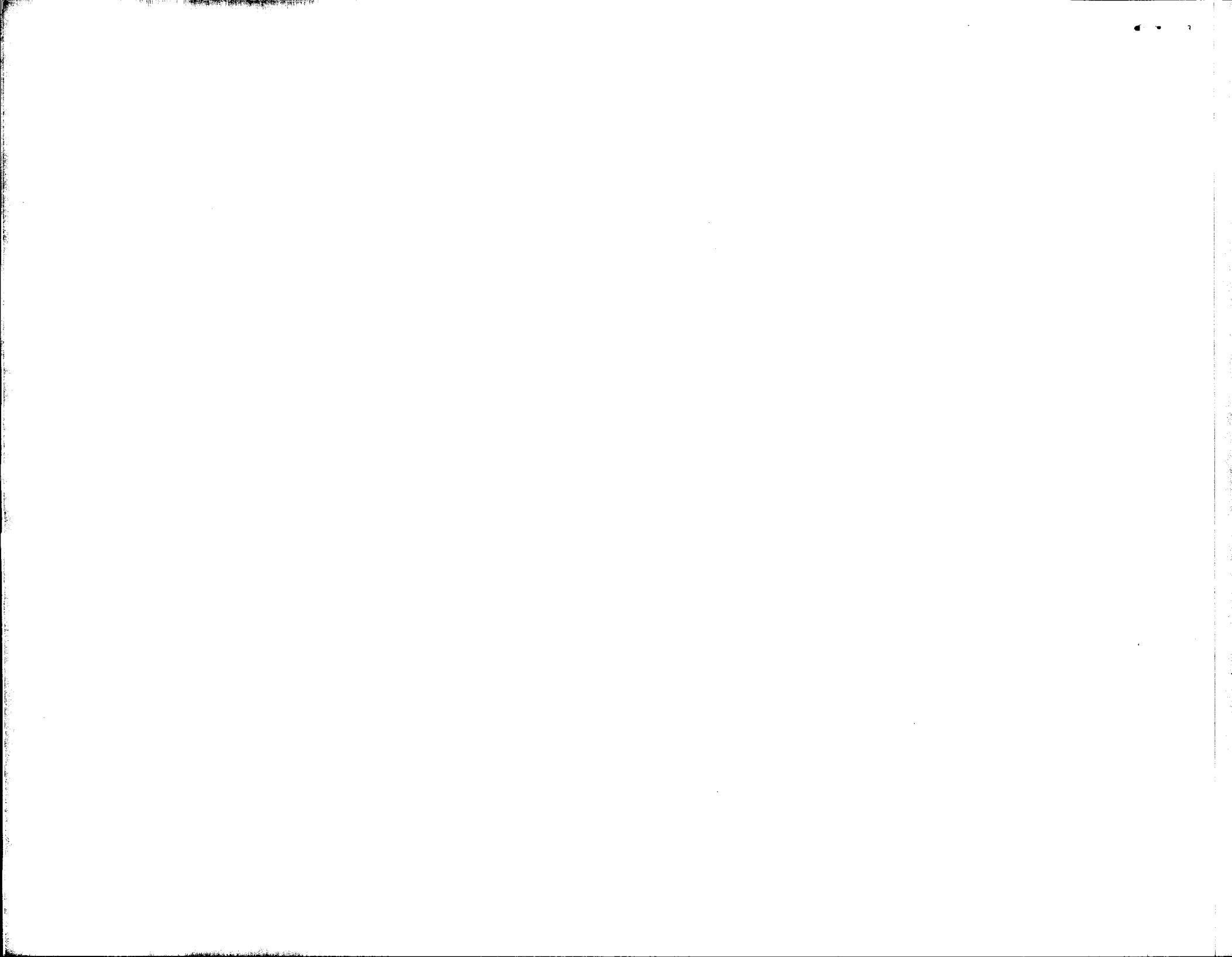
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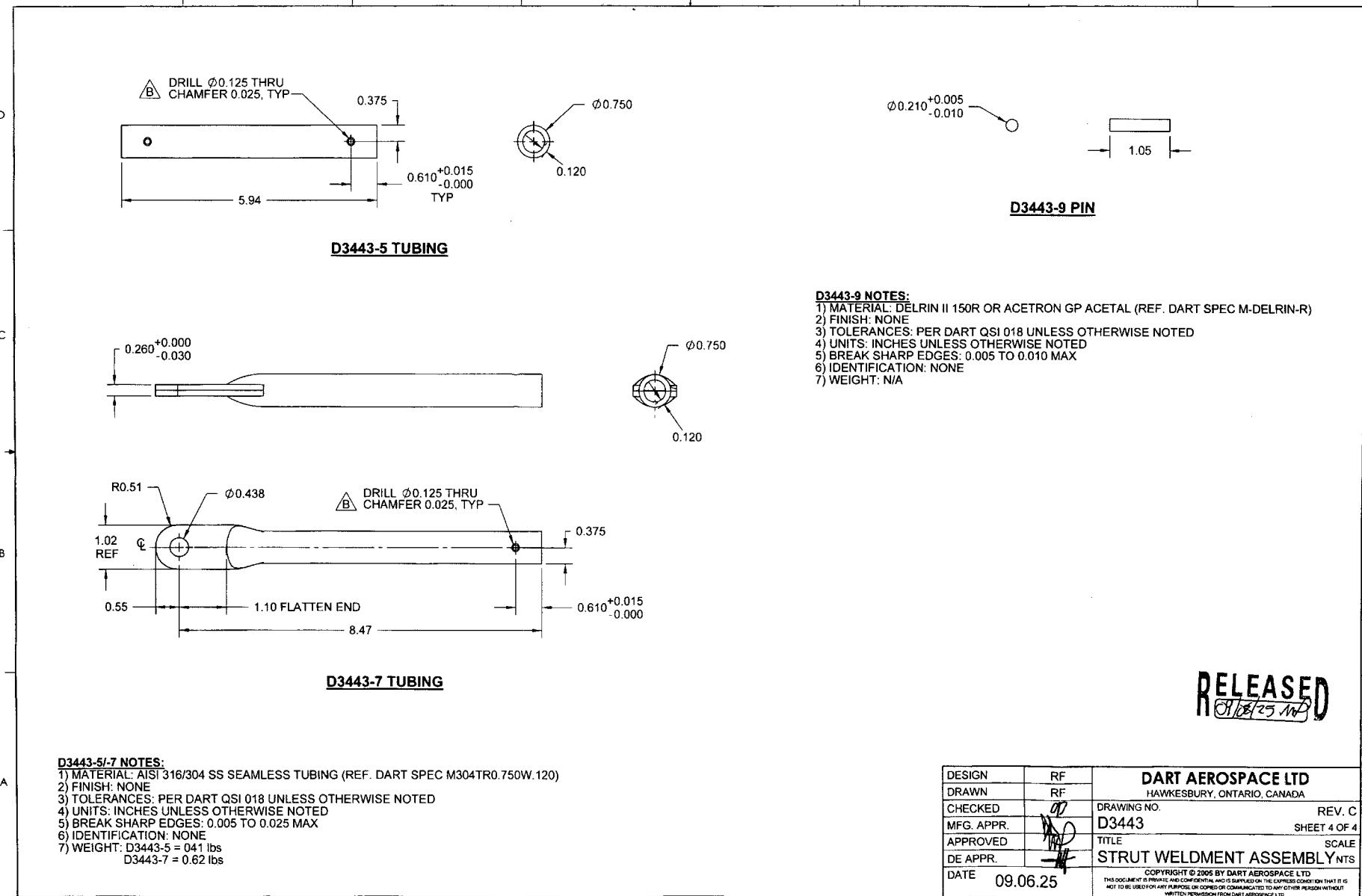




DESIGN	RF	DART AEROSPACE LTD			
DRAWN	RF	HAWKESBURY, ONTARIO, CANADA			
CHECKED	JP	DRAWING NO.			
MFG. APPR.		REV. C			
APPROVED	SJ	SHEET 3 OF 4			
DE APPR.		TITLE			
DATE	09.06.25	SCALE			
STRUT WELDMENT ASSEMBLY NTS					
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RELEASED
09/08/25/M





D3443-5/7 NOTES:

- 1) MATERIAL: AISI 316/304 SS SEAMLESS TUBING (REF. DART SPEC M304TR0.750W.120)
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.025 MAX
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: D3443-5 = 0.41 lbs
D3443-7 = 0.62 lbs

DESIGN	RF	DART AEROSPACE LTD	
DRAWN	RF	HAWKESBURY, ONTARIO, CANADA	
CHECKED	DP	DRAWING NO.	
MFG. APPR.	MD	D3443	REV. C
APPROVED	MM	SHEET 4 OF 4	TITLE
DE APPR.	MM	SCALE	STRUT WELDMENT ASSEMBLY
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07/25/05